

APPENDIX A
LIST OF RELATED LAWS, RULES AND REGULATIONS

- < Drug-Free Workplace Act of 1988
- < Omnibus Transportation Employee Testing Act of 1991
- < Code of Federal Regulations 34CFR Part 85 Subpart F
- < 49CFR Parts 40, and 382
- < Utah Code Annotated 67-19-36 (Testing)
- < Utah Code Annotated 67-19-37 (Discipline)
- < Utah Code Annotated 67-19-38 (Violations and Penalties)
- < Department of Human Resource Management Rule 477-9-1 (Employee conduct)
- < Department of Human Resource Management Rule 477-11 (Discipline)
- < Department of Human Resource Management Rule 477-14 (Substance abuse and drug-free work place)

APPENDIX B SAFETY SENSITIVE DESIGNATION

The following criteria apply in determining whether or not a job or position is designated as safety sensitive and is subject to drug testing as a condition of employment.

1. All positions which require any level Commercial Driver License (CDL).
2. All positions which require any level of Peace Officers Standards and Training (P.O.S.T.) certification. POST certification includes possible access to drugs and firearms which may be available due to situations a peace officer may encounter.
3. All positions which are subject to drug and alcohol testing under the Omnibus Transportation Employee Testing Act of 1991.
4. Positions involved in work that directly impacts the safety or welfare of the general public (i.e., radio dispatchers, highway maintenance crews, traffic signal specialists).
5. Positions involved in work which requires access to controlled substances.
6. Positions which require employee to carry or have access to firearms.

The following is a list of safety sensitive designations available in HRE

Air Transportation:	Positions related to air transportation
General Safety:	Positions impact general public safety
POST:	Positions require peace officers standards training
Drugs Access &/or Firearms:	Positions have access to drugs and/or firearms.
Commercial Driver License:	Positions requires commercial driver license
Commercial Driver License POST:	Positions requires commercial driver license and POST certification.

All jobs have been reviewed by the Department of Human Resource Management to determine whether "safety sensitive" designation is warranted. A complete list of safety sensitive jobs are available on the DHRM web site at WWW.DHRM.state.ut.us. Jobs on this list are subject to pre-employment and random drug testing. Additional positions may be classified as safety sensitive by DHRM on a case by case basis. All employees may be drug tested on a reasonable suspicion basis.

**APPENDIX C
State of Utah
Drug Program Coordinators
Site Coordinators**

Admin. Services	Kerri Adams (DPC) Dept. of Admin. Services 3120 State Office Bldg. SLC, UT 84114	538-3220
Agriculture	Meredith Caley DHRM Analyst (DPC) Renee Matsuura (SC) Norma Atkinson (SC) Dept. of Agriculture 350 N. Redwood Road SLC, UT 84116	538-9728 538-7110 538-7112
Alcoholic Beverage Control	Michael Tribe DHRM Analyst (DPC) Doug Murikami (SC) Alcoholic Beverage Control 1625 S. 900 W. P.O. Box 30408 SLC, UT 84130-0408	538-3627 977-6843
Attorney General	Marian Capito DHRM Analyst (DPC) Vickie Walker (SC) Attorney General 236 State Capitol SLC, UT 84114	538-9535 538-1321
State Auditor	Kimberly Diamond Smith DHRM Analyst (DPC) Maria Fandl (SC) State Auditor 211 State Capitol SLC, UT 84111	538-3413 538-1361
Board of Pardons	Julie Brogdon DHRM Analyst (DPC) John Green (SC) Board of Pardons 448 E 6400 S #300 SLC 84107	538-3280 261-6470

Career Service Review Board	Michael Tribe DHRM Analyst (DPC) Robert Thompson (SC) Career Service Review Board 1120 State Office Bldg. SLC, UT 84114	538-3627 538-3047
Commerce	Judy Price DHRM Analyst (DPC) Klare Bachma (SC) Dept. of Commerce 2 nd Floor, Administration 160 E. 300 S. SLC, UT 84111	538-3413 530-6702
Community & Economic Development	Bonnie Burley (HR Director/DPC) Dept. of Community & Econ. Devlpmt. 324 South State SLC, UT 84111	538-8715
Corrections	David Salazar (HR Director) Karl Hopkins (DPC) Billie King (SC) Judy Christensen (SC) Corrections 14717 Minuteman Dr Draper UT 84020 SLC, UT 84107	545-5921 545-5941 545-5924
Crime Victims Rep	Jenny Hanson DHRM Analyst (DPC) Patti Jensen (SC) 350 E 500 S # 200 SLC UT 84111	538-3825 238-2368
Criminal & Juvenile Justice	Cass Opheikens DHRM Analyst (DPC) David Walsh (SC) Room 101 State Capitol Bldg SLC UT 84114	537-9051 538-1058
Education/Rehabilitation	Marlo Wilcox (HR Director) Brian Gough (DPC) Dept. of Education 250 E. 500 S. SLC, UT 84111	538-7652 538-7560

Environmental Quality	Dan Brentel (HR Director) Charlene Lamph (DPC) Environmental Quality 168 N 1950 W SLC, UT 84114-4810	536-4412 536-4413
Financial Institutions	Michael Tribe DHRM Analyst (DPC) Irene Martinez PO BOX 89 SLC UT 84110-0089	538-3627 538-8832
Governor's Office	Marian Capito DHRM Analyst (DPC) Fran Stultz Room 210 State Capitol SLC UT 84114	538-9535 538-1514
Health	Jennifer Bingham (HR Director) Brooke Baker (DPC) Dept. of Health 288 N. 1460 W. SLC, UT 84116-0700	538-6625 538-6809
Human Resource Mgmt.	Michael Tribe (DPC) Jean Mills-Barber (DPC) Dept. of Human Resource Mgmt. 2120 State Office Bldg. SLC, UT 84114	538-3627 538-3076
Human Services	John Mathews (HR Director) John Golom (DPC) Jay Jensen (DPC) Rosanne Ricks (DPC) Office of Human Resources P.O. Box 45500 120 N. 200 W. SLC, UT 84145-0500	538-4220 538-4229 538-4231 538-4217
DHS/State Hospital	John Mathews (HR Director) *David Gardner (DPC) John Golom (DPC) Jay Jensen (DPC) Rosanne Ricks (DPC) Utah State Hospital P.O. Box 270 Provo, UT 84603-0270	538-4220 344-4568 538-4229 538-4231 538-4217

DHS/Developmental Center	John Mathews (HR Director) *Dave Laycock (DPC) John Golom (DPC) Jay Jensen (DPC) Rosanne Ricks (DPC) Utah State Developmental Center 895 N. 900 E. American Fork, UT 84003	538-4220 763-4000 538-4229 538-4231 538-4217
Insurance	Julie Brogdon DHRM Analyst (DPC) Julie Olearain (SC) Dept. of Insurance 3110 State Office Bldg. SLC, UT 84114	538-3280
Labor Commission	Michael Tribe DHRM Analyst (DPC) Gordon Linnett (SC) 160 E. 300 S. SLC, UT 84114	538-3627 530-6816
Legislative Offices	Marian Capito DHRM Analyst (DPC)	538-9535
National Guard	Julie Brogdon DHRM Analyst (DPC) Toni Peacock (SC) Utah National Guard 12953 S. Minuteman Drive Draper, UT 84020	538-3280 523-4228
Natural Resources	Carlos Rodriguez (HR Director) Glenn Parsons (DPC) Dept. of Natural Resources 168 W 1950 W SLC, UT 84114-4810	532-7210 538-7210
Planning & Budget	Marian Capito DHRM Analyst (DPC)	538-9535
Public Safety	Lin Miller (HR Director) Rae Catlin (DPC) Dept. of Public Safety 4501 S. 2700 W. SLC, UT 84119	965-4481 965-4526

DPS/Highway Patrol	Lin Miller (HR Director) Rae Catlin (DPC) Carol Ownby (SC) Utah Highway Patrol 4501 S. 2700 W. SLC, UT 84119	965-4481 965-4526 965-4741
DPS/Peace Officer	Lt. Randall Richey (DPC) Peace Officers Standards and Training 4501 S. 2700 W. SLC, UT 84119	965-4731
Public Service	Jenny Hanson DHRM Analyst (DPC) Julie Orchard Public Service Commission 160 E. 300 S. SLC, UT 84111	538-3825 530-6713
School for Deaf & Blind	Bruce Buland (HR Director/DPC) School for the Deaf and Blind 742 Harrison Blvd. Ogden, UT 84404	629-4725
Schools & Inst. Trust Lands	Meredith Caley DHRM Analyst (DPC) Nancy Bauman (SC) 675 E 500 S Salt Lake City UT 84102	538-9728 538-5113
Tax Commission	Barbara Hanson(HR Director) Karen Horan (DPC) Tax Commission Administration - Human Resources 210 N. 1950 W. SLC, UT 84134	297-3828 297-3877
Transportation	Alan Lake (HR Director) Gaye Betts (DPC) Dept. of Transportation 4501 S. 2700 W. SLC, UT 84119	965-4053 965-4249
Treasurer's Office	Cassandra Opheikens DHRM Analyst (DPC)	537-9051
Workforce Services	Leslie Hintze (DPC) Dept. of Workforce Services 140 E. 300 S. 5 th Floor SLC,UT 84111	526-4333

Effective August 1, 2003

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THE FOLLOWING PEOPLE ARE NOT DPC/SC, BUT THEY DO RECEIVE A COPY OF UPDATES TO THE MANUAL:

Collection Services

Tom Carlson
Choicepoint Drug Testing
480 Quadrangle Suite A
Bolingbrook IL 60440
1-866-266-2498
801-209-0082
Email: tcarlson@nsacorp.com

CRIME PREVENTION

Kevin L. McCloskey, Ph.D., J.D.
Utah Council for Crime Prevention Drugs in the Workplace Task Force
66 E. Cleveland Avenue
Salt Lake City, Utah 84115
801-486-8691

**APPENDIX D
STATE OF UTAH
DRUG AND ALCOHOL CONTRACTORS**

**As of
JUNE 1, 2001**

These contracts and Memorandums have been established through the Division of Purchasing contracting process by the Department of Human Resource Management. All negotiations for extensions and modifications will be the responsibility of the Department of Human Resource Management. Suggestions for contract/memorandum of understanding changes should be addressed to the State Drug Program Coordinator, Department of Human Resource Management, 2120 State Office Building, Salt Lake City UT 84114. Phone: 538-3025

<i>SERVICE TYPE</i>	<i>VENDOR</i>	<i>POINT OF CONTACT</i>
Urine Specimen Collection, Blood Alcohol Concentration Testing and MRO services	Choicepoint Drug Testing/Workplace Solutions	Choicepoint 480 Quadrangle Suite A Bolingbrook IL 60440 Tom Carlson Local contact 801-209-0082 Customer service 1-866-266-2498 Random Selection 1-800-939-4782 ex 5636 Onsite Collection 1-800-992-2672 ex 126 Web Reporting Address www.cpscreen.net

APPENDIX E GUIDELINES FOR FRONT LINE SUPERVISORS

WHAT TO DO IF SUBSTANCE ABUSE IS SUSPECTED

When, as a supervisor, you have reason to suspect that an employee is under the influence of drugs or alcohol there are several things you should do. First, document the specific behaviors that you have observed. Second, contact your agency drug program coordinator (DPC) or human resource office if the DPC is not available. In consultation with the DPC review the facts to determine whether a reasonable suspicion exists. Third, if it is determined that reasonable suspicion does exist, the DPC (or human resources) will contact the collections agency and schedule a test.

After the observation and documentation of suspicious behavior, and contacting the agency drug program coordinator, the employee, and a second supervisor if possible, should be taken into to a private area, and informed that due to certain specific actions, signs, or symptoms indicative of substance abuse, it will be necessary for him/her to undergo a reasonable suspicion substance abuse test. You should also explain that they must obtain a negative on the test before being permitted to return to work. As this can be seen as a serious threat to the employee, s/he may become very defensive and argumentative. It is the responsibility of the supervisor to remain calm and professional at all times, and not to get into an argument or "shouting match" with the employee. Remember that referring an employee for drug testing is not an accusation, but rather an attempt to identify the underlying cause of an observed behavior. Finally, when a supervisor suspects an employee of substance abuse and is considering requiring the employee to undergo a reasonable suspicion drug test, he/she should write down their observations and consider this question:

Would another similarly trained supervisor, being reasonable and prudent, and having observed and documented the same fact, signs, behaviors and circumstances, conclude that there is a reasonable suspicion of substance misuse?

ABOUT DRUGS AND THEIR EFFECTS

Part of making our anti-drug program a success is assuring that our employees and supervisors understand and can recognize the effects of drugs, on the individual and the workplace. This section provides specific summaries which describe drugs of abuse, the signs and symptoms of use, and the health and workplace issues that they pose. Individual fact sheets are provided for

- Marijuana
- Amphetamines
- Alcohol
- Cocaine
- Opiates (Narcotics)
- Phencyclidine (PCP)

This introductory section summarizes the data from the individual fact sheets for use as a quick reference on the signs and symptoms of drug and alcohol abuse and the effects of abuse on the workplace.

SUBSTANCE ABUSE ISSUES

- Drug and alcohol abuse
- Use and misuse of prescriptions and over the counter medication
- Drug trafficking and dealing
- Emotional distress and illness
- Physical illness and chronic health conditions
- Lifestyle issues (lack of sleep, poor diet, lack of exercise, etc.)

Recognition of drug or alcohol abuse requires attentiveness your surroundings. You should look for behaviors that are unsafe or unproductive. The ability to recognize the obvious signs and symptoms of use (e.g., obvious intoxication or impairment) is not sufficient to deal with the more subtle manifestations of substance abuse. Unfortunately, the problem is usually advanced by the time overt signs and symptoms appear. Most drug and alcohol related employee problems should not be surprises. A deterioration in work performance and attitude will usually precede a drug or alcohol related crisis.

SIGNS AND SYMPTOMS OF ABUSE

The first indicators of drug use within the workforce may not point directly to specific employees or to substance abuse. Drug use generally results in performance indicators, which are similar to those attributable to job stress, overwork, fatigue, or emotional problems. To make recognition even more difficult, drug and alcohol abusing employees develop survival skills for avoiding detection. Therefore, you should be aware of the following general indicators of substance abuse:

Absenteeism: Tardiness or excessive use of sick time may be seen. Drug and alcohol affected employees are absent an average of two to three more than the normal employee.

Staff Turnover: Chemically dependent people have disorganized lives. Many quit rather than face detection. Others transfer or are fired for poor and unsafe performance.

Lower productivity: Studies have shown drug and alcohol affected employees perform at about two-thirds of their actual work potential.

Equipment Breakdown: Substance-abusing employees lose interest in maintenance of equipment and may use broken equipment as a means to avoid work.

Poor work quality: Examples of shoddy work, rework, and material wastage may be evident. Mental and physical ability and concentration deteriorate with substance abuse.

Poor morale: Chronic drug abuse creates wide mood swing, anxiety, depression, and anger. Normal employees often see drug abusers as poor team workers and safety hazards.

Increased accidents and near misses: Impaired employees are 3.6 times more likely to cause an accident. Even small quantities of drugs in the system, as well as the hangover effect, can cause a deterioration of alertness, clear mindedness, and reaction speed.

Theft of equipment and material: Drugs are expensive. Cocaine costs up to \$135 a gram. One ounce of high potency marijuana costs \$85 to \$125. At the same time that drug abusers need money, their loyalty and dedication to their employers is weakened as their value systems and judgment are affected by the drug.

These performance indicators are best addresses through the normal performance monitoring and correction processes. Most successful interventions start with a performance confrontation. This confrontation is based on objective documented information related to performance deterioration, not the specific signs of substance abuse.

DRUG EFFECTS

Drug and alcohol abuse affects a person physically and mentally. These effects occur not only during intoxication (from one to 24 hours after intake), but also show up in residual hangovers, fatigue, rebounds, and mental impairment. Other physical and mental effect may include:

- Slow reactions
- Poor coordination
- Fatigue
- Delayed Decision Making
- Erratic judgment quality
- Confusion
- Learning difficulty
- Poor memory
- Loss of concentration
- Depression or anxiety
- Difficulty in sorting out priority tasks from non-essential activity
- Neurotic or psychotic behavior
- Refusal to accept authority
- Runny nose or sores around nostrils (caused by chronic snorting of cocaine)
- Sleeping on the job
- Slow reactions
- Slurred speech
- Unsteady gait

Wearing sunglasses indoors

Very large or small pupils (Narcotics and depressant will cause the pupils to constrict.

Cocaine and amphetamines will cause the pupils to dilate.)

COMMON SITES FOR USE

Lunchroom and lounge areas

Parking lots and cars

Remote areas of the work-site

Equipment or storage rooms

Restrooms

CANNABIS (MARIJUANA) FACT SHEET

Marijuana is one of the most misunderstood and underestimated drugs of abuse. People use marijuana for the mildly tranquilizing and mood and perception altering effects it produces. Marijuana does not depress central nervous system reactions. Its action is almost exclusively on the brain, altering the proper interpretation of incoming messages.

DESCRIPTION

Usually sold in plastic sandwich bags, leaf marijuana will range in color from green to light tan. The leaves are usually dry and broken into small pieces. The seeds are oval with one slightly pointed end. Less prevalent, hashish is a compressed sometimes tar-like substance ranging in color from pale yellow to black. It is usually sold in small chunks rapped in aluminum foil. Marijuana has a distinctly pungent aroma resembling a combination of sweet alfalfa and incense. Cigarette papers, roach clip holders, and small pipes made of bone, brass, or glass are commonly found. Smoking bongs (large bore pipes for inhaling large volumes of smoke) can easily be made from soft drink cans and toilet paper rolls.

SIGNS AND SYMPTOMS OF USE

- Reddened eyes (often masked by eye drops)
- Slowed speech
- Distinctive odor on clothing
- Lackadaisical or I don't care attitude
- Chronic fatigue and lack of motivation
- Irritating cough, chronic sore throat.

BEHAVIORAL SIGNS

When general performance or behavior problems are noted in an employee, the following may indicated the involvement of drug or alcohol use:

- A sudden change, usually for the worse (change in attitude, work performance and behavior)

- A lackadaisical or I don't care attitude (often an indication of marijuana use)
- Deteriorating or erratic performance
- Hangover symptoms
- Drug culture jargon
- Secretive behavior
- Wanting to be alone, avoiding straight workers
- Forgetfulness, indecision, and erratic judgment
- Impulsive and temperamental behavior
- Changes in personal; appearance and hygiene
- Jitters, hand tremors, hyper-excitability
- Sleeping in the job

Note that each symptom, by itself, may point to problems other than drug abuse. But, when a pattern begins to develop, the supervisor or manager needs to be alert and act quickly. When fueled by drug or alcohol abuse, these behaviors can lead to greater absenteeism, higher operating costs, serious production problems, and a definite increase in accidents and health care costs.

SPECIFIC EVIDENCE OF USE

Signs and Symptoms pointing directly to serious substance abuse include the following:

Paraphernalia: Needles, balloons, aluminum foil wrappers, cocaine sniffing tools, marijuana smoking pipes and holders, drug containers obviously not used for legitimate purposes.

Presence of drugs: Plastic sandwich bags, small containers of tablets or capsules, or vials or envelopes of powder.

PHYSICAL SYMPTOMS

Observable physical signs and symptoms usually are not apparent until the employee's abuse of drugs or alcohol has reached a level that is compulsive. The employee then is less able to disguise the physical indicators of use. With greater use, there is often carelessness caused by a clouded mental state. Specific signs include:

- Blood spots on shirtsleeve (indicating intravenous use)
- Bloodshot or watery eyes (usually caused by marijuana use)
- Changes in speech
- Hand tremors
- Intoxicated behavior
- Odor of alcohol on breath
- Odor of marijuana smoke
- On-the-job, out-in-the-open drug use
- Poor coordination
- Racing heart, irregular rhythms (Cocaine and amphetamines often cause the heart to react unpredictably.)

GENERAL HEALTH EFFECTS

When marijuana is smoked, it is irritating to the lungs. Chronic smoking, causes emphysema-like conditions. One cigarette (joint) of marijuana contains cancer causing substances equivalent to one-half to one pack of cigarettes. One joint causes the heart to race and be overworked. People with undiagnosed heart conditions are at risk. Marijuana is commonly contaminated with the fungus *Aspergillus*, which can cause serious respiratory tract and sinus infections. Marijuana smoking lowers the body's immune systems response making users more susceptible to infection. The U.S. government is actively researching a possible connection between marijuana smoking and the activation of AIDS in positive human immunodeficiency virus (HIV) carriers. Chronic smoking causes changes in brain cells and brain waves. In essence, the brain is less healthy and does not work as efficiently or effectively. Does long-term brain damage occur? More research is required, but the probable answer is yes.

PREGNANCY PROBLEMS AND BIRTH DEFECTS

The active chemical, tetrahydrocannabinol (THC), and 60 other related chemicals in marijuana concentrate in the ovaries and testes. Chronic smoking of marijuana in males causes a decrease in the sex hormone, testosterone, and an increase in estrogen, the female sex

hormone. The result is a decrease in sperm count, which can lead to temporary sterility. Occasionally, the onset of female sex characteristics including breast development occurs in heavy users. Chronic smoking of marijuana in females causes a decrease in fertility and an increase in testosterone. Pregnant women who are chronic marijuana smokers have a higher than normal incidence of stillborn births, early terminations of pregnancy, and higher infant mortality rate during the first few days of life. In test animals, THC causes birth defects, including malformations of the brain, spinal cord, forelimbs, liver, and water on the brain and spine. Offspring of test animals who were exposed to marijuana have fewer chromosomes than normal, causing gross birth defects or death of the fetus. Pediatricians and surgeons are concluding that the use of marijuana by either or both parents, especially during pregnancy, leads to specific birth defects of the infant's feet and hands. One of the most common effects of prenatal cannabinoid exposure is underweight newborn babies. Fetal exposure may decrease visual functioning and can cause other ophthalmic problems.

MENTAL FUNCTION

Regular use can cause the following effects:

Delayed decision-making

Diminished concentration

Impaired short-term memory, interfering with learning. Impaired signal detection (ability to detect a brief flash of light), a risk for users who are operating machinery.

Impaired tracking (the ability to follow moving objects with the eyes) and visual distance measurements.

Erratic cognitive function

Distortions in time estimation

Long term negative effects on mental function known as acute brain syndrome that is characterized by disorders in memory, cognitive function, sleep patterns, and physical condition.

ACUTE/OVERDOSE EFFECTS

Aggressive urges

Anxiety

Confusion

Fearfulness

Hallucinations

Heavy Sedation

Immobility

Mental dependency

Panic

Paranoid reaction

Unpleasant distortions in body image

WORK PLACE ISSUES

The active chemical, THC, stores in body fat and slowly releases over time. Marijuana smoking has a long-term effect on performance. A 500 to 800 percent increase in THC potency in the past several years makes smoking three to five joints a week today equivalent to 15 to 40 joints a week in 1978. Combining alcohol or other depressant drugs and marijuana can produce a multiplied effect, increasing the impairing, effects of both the depressant and marijuana.

COCAINE FACT SHEET

Cocaine is used medically as a local anesthetic. It is abused as a powerful physical and mental stimulant. The entire central nervous system is energized. Muscles are more tense, the heart beats faster and stronger, and the body burns more energy. The brain experiences exhilaration caused by a large release of neuro-hormones associated with mood elevation.

DESCRIPTION

The source of cocaine is a coca bush, grown almost exclusively in the mountainous regions of northern South America. Cocaine Hydrochloride - snorting cake is a white creamy granular or lumpy powder that is chopped into a fine powder before use. It is snorted into the nose, rubbed on the gums, or injected in veins. The effect is felt within minutes and lasts 40 to 60 minutes per line (about 60 to 90 milligrams). Common paraphernalia includes a single edged razor blade and a small mirror or piece of smooth metal, a half straw or metal tube, and a small screw cap vial or folded paper packet containing the cocaine.

Cocaine Base - rock, crack, or free base, is a small crystalline rock about the size of a small pebble. It boils at a low temperature, is not soluble in water, and up to 90 percent pure. It is heated in a glass pipe and the vapor is inhaled. The effect is felt within seven seconds.

Common paraphernalia includes a crack pipe (a small glass smoking device for vaporizing the crack crystal) and a lighter, alcohol lamp, or small butane torch for heating.

SIGNS AND SYMPTOMS OF USE

- Financial problems
- Frequent and extended absences from meeting or work assignment
- Increases physical activity and fatigue
- Isolation and withdrawal from friends and normal activities
- Secretive behaviors, frequent non-business visitors, delivered packages, phone calls
- Unusual defensiveness, anxiety, agitation
- Wide mood swings
- Runny or irritates nose
- Difficulty in concentration
- Dilated pupils and visual impairment
- Restlessness
- Formication (sensation of bugs crawling on skin)
- High blood pressure, heart palpitations, and irregular rhythm
- Hallucinations
- Hyper-excitability and overreaction to stimulus
- Insomnia
- Paranoia and hallucinations
- Profuse sweating and dry mouth
- Talkativeness

HEALTH EFFECTS

Research suggests that regular cocaine use may upset the chemical balance of the brain. As a result, it may speed up the aging process by causing irreparable damage to critical nerve cells.

The onset of nervous system illness such as Parkinson's disease could also occur. Cocaine use causes the heart to beat faster and harder and rapidly increase blood pressure. In addition, cocaine causes spasms of blood vessels in the brain and heart. Both effects lead to ruptured vessels causing strokes and heart attacks. Strong psychological dependency can occur with one hit of crack. Usually, metal dependency occurs within days (crack) or within several months (snorting coke). Cocaine causes the strongest mental dependency of any drug. Treatment success rates are lower than for other chemical dependencies. Cocaine is extremely dangerous when taken with depressant drugs. Death due to overdose is rapid. The fatal effects of an overdose are not usually reversible by medical intervention. The number of cocaine overdose deaths has tripled in the last four years. Cocaine overdose was the second most common drug emergency in 1986 up from 11th place in 1980.

WORKPLACE ISSUES

Extreme mood and energy swings create instability. Sudden noises can cause a violent reaction. Lapses in attention and ignoring warning signals greatly increase the potential for accidents. The high cost of cocaine frequently leads to workplace theft and/or dealing. A developing paranoia and withdrawal create unpredictable and sometime violent behavior. Work performance is characterized by forgetfulness, absenteeism, tardiness, and missed assignments.

AMPHETAMINES FACT SHEET

Amphetamines are central nervous system stimulants that speed up the mind and body. The physical sense of energy at lower doses and the mental exhilaration at higher doses are the reasons for their abuse. Although widely prescribed at one time for weight reduction and mood evaluation, the legal use of amphetamines is now limited to a very narrow range of medical conditions. Most amphetamines that are abused are illegally manufactured in foreign countries and smuggled into the U.S. or clandestinely manufactured in crude laboratories.

DESCRIPTION

Amphetamine (Speed) is sold in counterfeit capsules or as white, flat, double scored mini bennies. It is usually taken by mouth. Methamphetamine (Meth, Crank, or Crystal) is nearly identical in action to amphetamine. It is often sold as a creamy white and granular powder or in lumps and is packaged in aluminum foil wraps or sealable plastic bags. Methamphetamine may be taken orally, injected, or snorted into the nose.

SIGNS AND SYMPTOMS OF USE

- Hyper-excitability, restlessness
- Dilated pupils
- Increased heart rate and blood pressure
- Heart palpitations and irregular beats
- Profuse sweating
- Rapid respiration
- Confusion
- Panic
- Talkativeness
- Inability to concentrate

HEALTH EFFECTS

Regular use produces strong psychological dependence and increasing tolerance to drug. High doses may cause toxic psychosis resembling schizophrenia. Intoxication may induce a heart attack or stroke due to spiking of blood pressure. Chronic use may cause heart and brain damage due to severe constriction of capillary blood vessels. The euphoric stimulation increases impulsive and risk taking behaviors, including bizarre and violent acts. Withdrawal from the drug may result in severe physical and mental depression.

WORKPLACE ISSUES

Since amphetamines alleviate the sensation of fatigue, they may be abused to increase alertness because of unusual overtime demands or failure to get rest. Low dose amphetamine use will cause a short-term improvement in mental and physical functioning. With greater use or increasing fatigue the effect reverses and has an impairing effect. Hangover effect is characterized by physical fatigue and depression, which make operation of equipment or vehicles dangerous.

OPIATES (NARCOTICS) FACT SHEET

Opiates (also called narcotics) are drugs that alleviate pain, depress body functions and reaction, and, when taken in large doses, can cause a strong euphoric feeling.

DESCRIPTION

Natural and natural derivatives - opium, morphine, codeine, and heroin

Synthetics - meperidine (Demerol), oxycodone (Numorphan), and oxycodone (Percodan)

May be taken in pill form, smoked, or injected depending upon the type of narcotic used.

SIGNS AND SYMPTOMS

- Mood Changes

- Impaired mental functioning and alertness

- Constricted pupils

- Depression and apathy

- Impaired coordination

- Physical fatigue and drowsiness

- Nausea, vomiting, and constipation

HEALTH EFFECTS

IV needle users have high risk of contracting hepatitis and AIDS due to the sharing of needles.

Narcotics increase pain tolerance. As a result, people could more severely injure themselves or fail to seek medical attention after an accident due to the lack of pain sensitivity. Narcotics effects are multiplied when used in combination with other depressant drugs, and alcohol, causing increased risk for an overdose.

SOCIAL ISSUES

There are over 500,000 heroin addicts in the U.S. most of whom are IV needle users. An even greater number of medicinal narcotic dependent persons obtain their narcotics through prescriptions. Because of tolerance, there is an ever-increasing need for more narcotics to produce the same effect. Strong mental and physical dependency occurs. The combination of tolerance and dependency creates an increasing financial burden for the user. Costs for heroin can reach hundreds of dollars a day.

WORKPLACE ISSUES

Unwanted side effects such as nausea, vomiting, dizziness, mental clouding, and drowsiness place the legitimate user and abuser at higher risk for an accident. Narcotics have a legitimate use in alleviating pain. Workplace use may cause impairment of physical and mental functions.

PHENCYCLIDINE (PCP) FACT SHEET

Phencyclidine (PCP) was originally developed as an anesthetic, but the adverse side effects prevented its use except as a large animal tranquilizer. Phencyclidine acts as both a depressant and hallucinogen, and sometimes as a stimulant. It is abused primarily for its variety of mood altering effects. Low doses produce sedation and euphoric mood changes. The mood can change rapidly from sedation to excitation and agitation. Larger doses may produce a coma-like condition with muscle rigidity and blank stare with eyelids half closed. Sudden noises or physical shocks may cause a freak out in which the person has abnormal strength, extremely violent behavior, and an inability to speak or comprehend communication.

DESCRIPTION

PCP is sold as a creamy, granular powder and often packaged in on in square aluminum foil or folded paper packets. It may be mixed with marijuana or tobacco and smoked. It is sometimes combined with procaine, a local anesthetic, and sold as imitation cocaine.

SIGNS AND SYMPTOMS OF USE

- Impaired coordination
- Severe confusion and agitation
- Extreme mood shifts
- Muscle rigidity
- Nystagmus (jerky eye movements)
- Dilated pupils
- Profuse sweating
- Rapid heartbeat
- Dizziness

HEALTH EFFECTS

The potential for accidents and overdose emergencies is high due to the extreme mental effects combined with the anesthetic effect on body. PCP is potentiated by other depressant drugs, including alcohol, increasing the likelihood of an overdose reaction. Misdiagnosing the hallucinations as LSD induced, and then treating with Thorazine, can cause a fatal reaction. Use can cause irreversible memory loss, personality changes and thought disorders.

WORKPLACE ISSUES

PCP abuse is less common today than in recent years. It is also not generally used in a workplace setting because of the severe disorientation that occurs. There are four phases to PCP abuse. The first phase is acute toxicity. It can last up to three days and can include combativeness, catatonia, convulsions, and coma. Distortions of size, shape, and distance perception are common. The second phase, which does not always follow the first, is a toxic psychosis. Users may experience visual and auditory delusions, paranoia, and agitation. The third phase is drug induced schizophrenia that may last a month or longer. The fourth phase is PCP induced depression. Suicidal and mental dysfunction can last for months.

ABOUT ALCOHOL AND ALCOHOLISM

Alcohol is unquestionably the most used and abused drug in the United States. Prior to the enactment of 49 CFR, Part 382, alcohol testing was not included in any required substance abuse regulation. Even though alcohol is legally and socially acceptable in our society, it is not legally acceptable to consume alcohol prior to, or while, operating a commercial motor vehicle. Many people believe that alcohol is a stimulant. The fact is, alcohol is a drug which belongs to a class of chemicals known as sedative-hypnotics. Included in this same drug classification are barbitals. Sedative-hypnotics cause sedation, relief from anxiety, slurring of speech, uncoordination, loss of inhibitions, impaired reasoning, impaired judgement, and in some individuals, extreme aggressiveness.

Consumption of alcohol can lead to liver damage, gastrointestinal ulcers, nerve damage, brain-cell damage, memory loss, sweating, increased risk of concern and respiratory depression. If ingested in large enough quantities death can result. In men, long-term alcohol abuse can cause a decrease in male hormones resulting in the development of female type breasts and impotence. Shakespeare said it best in his play Macbeth when he said; "Drink doth provoke the desires but dulls the performance."

Knowing the serious side effects of alcohol abuse, why do so many Americans misuse alcohol, and why do so many drink and drive? The answer may well be that they are addicted to alcohol and are unable to control their alcohol use. Recent discoveries in the medical field have lead to determination that alcoholism is a disease caused in large part by genetics. When discussing the term addiction it is important to note that addiction is the uncontrollable urge to obtain the substance to which one is addicted; in this case, alcohol. In any discussion of alcoholism and of employees who use alcohol while or immediately prior to working it is necessary that you always keep in mind that alcoholism is a disease, and that any effort to control its use among employees must be approached cautiously. It is important to note that alcoholism, like any addiction, cannot be controlled without professional help. Many individuals may not even know that they are addicted. Many of those who do know, don't know how to seek assistance or are too embarrassed to ask for help.

ALCOHOLISM

Alcoholism can happen to anyone. When most people think of an alcoholic the thoughts that are conjured up is that of a lazy, disheveled, wino or bum who is homeless and living on the street. The terms worthless and irresponsible also come to mind when the term alcoholic is used. Research has shown that the disease of alcoholism can attack anyone. It is no different from other afflictions such as heart disease or cancer. Therefore, persons who have the disease of alcoholism are not necessarily lazy, dirty, disheveled, homeless, poor, uneducated or irresponsible. They can be company presidents, bank presidents, major league ball players, attorneys, doctors, and drivers.

The Federal Highway Administration (FHWA) determined, during the rule-making process which led to the development of 49 CFR, Part 382, that an important feature in the regulation had to be referral, evaluation and treatment by a substance abuse professional for any driver found to have violated the prohibitions found in Subpart B.

The primary purpose of Part 382.605, the referral, evaluation and treatment section of these regulations, is to offer a method whereby an employee who may have a substance abuse

(including alcohol) problem, has a way to receive professional assistance in dealing with the problem. The hope of the FHWA is that any person who has violated any of the prohibitions will receive the professional assistance the s/he needs and will then be able to return as a productive employee.

SIGNS AND SYMPTOMS OF ALCOHOL MISUSE

Coma	Short Attention Span
Nausea	Impaired Judgment
Hostility	Slowed Reaction Times
Drowsiness	Impaired Visual Tracking
Incoherence	Blurred or Distorted Vision
Unsteadiness	Increased Tolerance Levels
Memory Loss	Distorted Sense of Time and Distance
Odor of Alcohol	Tunnel Vision (loss of peripheral vision)
Slurred Speech	Aggressiveness

As can be seen, signs and symptoms of alcohol use and misuse are very similar to the signs and symptoms of use of controlled substances. The effects of alcohol on various persons are dependent on many factors. The first and most obvious factor is the quantity of alcohol consumed. Other factors include; a person's body weight, whether the person is rested or tired, sick or healthy, stomach content, age, altitude and gender.

When discussing the effects of alcohol the term impairment is used. Alcohol effects each person differently according to the factors previously mentioned. Research has shown, for example, that women will become more impaired than men of the same size and body weight and from the same quantity of alcohol because they metabolize alcohol differently than men. As a general rule, a large person will be less impaired than a smaller person drinking the same quantity of alcohol. An individual who is sick or tired will become impaired quicker than one who is rested and healthy. Drinking at higher altitudes will cause greater impairment than drinking at lower altitudes. For example, having a drink in Denver, Colorado with an altitude of 5,280 feet above sea level, will have a greater impact than having a drink in Key West, Florida with an altitude of 2 feet above sea level.

The impairment observed will be dependent upon all of these factors. The degree of impairment and the effects in a person's body change significantly as more alcohol is ingested. Research has shown that impairment begins with the first drink. Tests have shown that a driver's reaction time increases as much as 60% after just 2 drinks.

As a rule the consumption of one or two drinks tends to relax the individual and create a feeling of well being. Beyond one or two drinks, alcohol begins to react differently on individuals at varying rates, dependent upon the factors previously discussed determining the rate of metabolism in the body.

HEALTH EFFECTS

The chronic consumption of alcohol (average of 3 servings per day) of: beer (12 ounces)], whiskey (1 ounce), or wine (6 ounces), over time may result in the following health hazards.

Decreased Sexual Functioning

Dependency (Up to ten percent of all people who drink alcohol become physically and/or mentally dependent on alcohol and can be termed "alcoholic").

Fatal Liver diseases

Increased cancers of the mouth, tongue, pharynx, esophagus, rectum, breast and malignant melanoma.

Kidney disease

Pancreatitis

Spontaneous abortion and neonatal mortality

Ulcers

Birth defects (Up to 54 percent of all birth defects are alcohol related).

SOCIAL ISSUES

Two-thirds of all homicides are committed by people who drink prior to the crime Two to three percent of the driving population is legally drunk at any one time. This rate doubles at night and on weekends. Two-thirds of all Americans will be involved in an alcohol related vehicle accident during their lifetime. The rate of separation and divorce in families with alcohol dependency problems is seven times the average. Forty percent of family court cases are alcohol problem related. Alcoholics are fifteen times more likely to commit suicide than are other segments of the population. More than 60 percent of burns, 40 percent of falls, 69 percent of boating accidents, and 76 percent of private aircraft accidents are alcohol related.

THE ANNUAL TOLL

24,000 people will die on the highway due to the legally impaired driver (0.10 blood alcohol content [BAC] or more).

12,000 more will die on the highway due to the alcohol affected driver (0.099 BAC or less).

15,800 will die in non-highway accidents

30,000 will die due to alcohol caused liver disease

10,000 will die due to alcohol induced brain disease or suicide

Up to 125,000 will die to other alcohol related conditions or accidents.

EFFECT ON DRIVING

The first noticeable effect on driving, in most cases is an impaired reaction time. The FHWA, in part 383 and Part 382, determined that the legal limit for alcohol for commercial drivers while operating a commercial motor vehicle is 0.04% BAC or BAL. BAC means Breath Alcohol Concentration and BAL refers to Blood Alcohol Level. The two terms are interchangeable. To understand what quantity of alcohol 0.04 represents, it means 4 drops of alcohol to 10,000 drops of blood. In tests conducted on commercial drivers at the 0.04 level, the average increase in reaction time to emergency braking situations was 60%. In many of the drivers tested they stated that they could not even feel the effects of the alcohol.

As more alcohol is ingested the impairment increases and the effects in driving become more noticeable. The effects on driving can be seen as:

increased reaction time

loss of peripheral vision

willing to take more risks

blurred or distorted vision

increased or erratic vehicle speed

- swerving (unable to stay in lane)
- impaired judgement (unable to make rapid decisions)
- excessive braking
- impaired visual tracking (unable to watch other vehicles as they approach or pass)
- more aggressive drinking
- less aggressive driving

The invidiousness of alcohol is that the first part of the brain to be affected is the part which controls judgment and self control. Once judgment and self-control have been disrupted, the impaired individual is unable to recognize that he/she is impaired and is unable to make rational decisions. This is what ultimately leads to the decision to get behind the wheel when impaired.

Alcohol dissipates, on average, at the rate of one drink per hour. To fully understand this it is necessary to define what is a drink. One drink is considered to be 2 ounce of pure alcohol. The reason 2 ounce is used is because the body can dissipate 2 ounce of pure alcohol per hour. A 4 ounce glass of 125 wine, a 12 oz. Can of beer and 1 oz. (A shot glass) of 100 proof liquor all contain 2 oz. of pure alcohol. It is necessary to have an understanding of this since FHWA regulations state that a driver may not consume an alcoholic beverage within 4 hours of reporting to work. If a driver consumed 6 doubles (a drink containing 1 oz. of pure alcohol) five hours before reporting to duty, s/he would be in compliance with the portion of the regulations prohibiting drinking within 4 hours of reporting to work, but would probably be in violation of the regulations stating that a driver may not perform a safety-sensitive function if his/her blood alcohol concentration level exceeds 0.02.